### **ENVIRONMENTAL CHEMISTS**

Date of Report: May 10, 1996 Date Received: May 2, 1996

Project: Metro Self Monitor, PO #M72056 Date Samples Extracted: May 6, 1996 Date Extracts Analyzed: May 9, 1996

# RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR CHROMIUM, COPPER, NICKEL, AND ZINC USING METHOD 6010

### Samples Processed Using Method 3005A Results Reported as mg/L (ppm)

Sample ID	Chromium	Copper	<u>Nickel</u>	<u>Zinc</u>
M72056	0.96	1.4	0.87	0.08
Method Blank	< 0.05	< 0.05	< 0.05	< 0.05

### **ENVIRONMENTAL CHEMISTS**

Date of Report: May 10, 1996 Date Received: May 2, 1996

Project: Metro Self Monitor, PO #M72056

# QUALITY ASSURANCE RESULTS FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 68534 (Duplicate)

Analyte:	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	mg/L (ppm)	0.96	0.95	1	0-20
Copper	mg/L (ppm)		1.2	15	0-20
Nickel	mg/L (ppm)	0.87	0.87	0	0-20
Zinc	mg/L (ppm)	0.08	0.09	12a	0-20

Laboratory Code: 68534 (Matrix Spike)

	Reporting	Spike	Sample	0/	Recovery	Acceptanc	Relative e Percent
Analyte:	Units	Level			China Communication of the Com		Difference
Chromium	mg/L (ppm)	5	0.96	95	99	80-120	4
Copper	mg/L (ppm)	5	1.4	93	93	80-120	0
Nickel	mg/L (ppm)	10	0.87	97	99	80-120	2
Zinc	mg/L (ppm)	5	0.08	98	100	80-120	2

Laboratory Code: Spike Blank

	Reporting	Spike	% R	ecovery	Acceptance	Relative Percent
Analyte:	Units	Level	MS	MSD	Criteria	Difference
Chromium	mg/L (ppm)	5	103	103	80-120	0
Copper	mg/L (ppm)	5	101	106	80-120	5
Nickel	mg/L (ppm)	10	103	103	80-120	0
Zinc	mg/L (ppm)	5	103	103	80-120	0

a - The analyte was detected at a level less than five times the detection limit. The RPD results may not provide reliable information on the variability of the analysis.

FRIEDMAN & BRUYA, INC. 3012 16th Avenue West Seattle, WA 98119-2029 (206) 285-8282

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# SAMPLE CHAIN OF CUSTODY

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### **ENVIRONMENTAL CHEMISTS**

Andrew John Friedman James E. Bruya, Ph.D. (206) 285-8282 3012 16th Avenue West Seattle, WA 98119-2029 FAX: (206) 283-5044

May 10, 1996

### INVOICE # 96ACU0510-1 DUPLICATE COPY

Accounts Payable Alaskan Copper Works 628 South Hanford Seattle, WA 98134

RE: Project Metro Self Monitor: Results of testing requested by Gerry Thompson, Project Manager for material submitted on May 2, 1996.

1 water sample analyzed for
Chromium, Copper, Nickel, and Zinc
using Method 6010 @ \$65 per sample

Amount Due \$65.00

#### **ENVIRONMENTAL CHEMISTS**

Andrew John Friedman James E. Bruya, Ph.D. (206) 285-8282

3012 16th Avenue West Seattle, WA 98119-2029 FAX: (206) 283-5044

May 10, 1996

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford Seattle, WA 98134

Dear Mr. Thompson:

Enclosed are the results from the testing of material submitted on May 2, 1996 from your Metro Self Monitor, PO #M72056 project.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

**Kurt Johnson** 

Chemist

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**Enclosures** ACU0510R.DOC